

Date: Monday, 18/08/2008 3:40:08 PM  
 User: Julie Lecocq

## Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: EC 135 SKIDTUBE ASSEMBLY
Job Number	: 41332		
Estimate Number	: 12472		
P.O. Number	:	Part Number	: D135751011
This Issue	: 18/08/2008 S.O. No. :	Drawing Number	: D3507 UNDER REVIEW <i>At 08.10.31</i>
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: // Type : SKIDTUBES	Drawing Revision	: C
Previous Run	: 28957	Material	:
Written By	:	Due Date	: 20/09/2008 Qty: 1 Um: Each
Checked & Approved By	: <i>JLD 08.8.18</i>		
Comment	: Est Rev:A 06-06-21 New Issue JLM Est Rev:B 06-12-18 As per Rev B JLM Est Rev:C 07-12-11 ECN 1036 as per revB DD		

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	DC	DOCUMENT CONTROL
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*JLD 08.09.11*

Comment: DOCUMENT CONTROL

Photocopy bluefile &amp; type labels per PPP D135-751-011 CHG001

*5 08/03/30*

2.0	D2962150	3.540 Outer Tube, Extrud
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Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
1	D2962-150	Extrusion	<i>28672</i>

*RT 08-08-26*

3.0	SKIDTUBES 1	SKIDTUBESS RESOURCE 1
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Comment: LANDING GEAR RESOURCE 1

1-Determine square end of tube and deburr

2-Drill #30 pilot holes using DT8678. Do not open holes.

3- Deburr holes.

*RT 08-08-26*

4.0	BENDING	BENDING MACHINE - SKIDTUBES
-----	---------	-----------------------------



Comment: BENDING MACHINE

Bend tube as per program on CNC Bender and Dwg D3507. Use 5/16" locator pin on buggy "A".

*RT 08.08.28*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Job Number: 41332

Part Number: D135751011

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

SKIDTUBES 1

SKIDTUBESS RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Cut Fwd end of the tube using DT8185

RT 08-08-28

2-Cut Aft end at VC using DT8185

3-Deburr ends

4-Drill Aft & Fwd Cap holes using DT8678

5-Locate DT8870 & Drill Ground wire hole on top of Tube.

6-Locate DT8870 with 3/16" cleco in Ground wire hole, then Pilot Drill all X-Bolt holes using 3/16" drill. \*\*\*\*DO NOT OPEN AFT CAP HOLES\*\*\*\*\*

7-Drill pilot holes for wearplates using Dt8868, Use DT8892 FOR REAR WEARPLATE HOLES.

8-Open wearplate holes to Ø19/64" (0.297") as per Dwg D3507.

9-Open Aft & Fwd Cap holes using .208" drill.

10-Bore out aft end of tube as per Dwg D3507 & Detail "B".

11-Deburr holes.

P10

RT  
08-09-08

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

66/10/09 P10

7.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

D 11 8-10-14

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



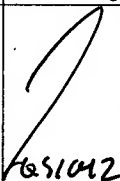

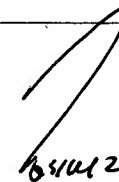

Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

RT 08-10-15

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D135-751-011 PAR #: N/A Fault Category: Prod/Skidube NCR: (Yes) No DQA: D Date: 08/10/09  
 QA: N/C Closed: H Date: 08/11/04

NCR: 41332		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
08-10-09	S.O	Employee drilled the holes off of the wear plate sig DT8868. Holes are to be drilled off of DT8892. R.C. Under Review & design changes.	 08-10-09	- Fill the 6 AFT wear plate holes with weld and grind flush A/R M/09213 - Re-drill holes with DT8892 per dwg.	BE 09 08-10-09 RT 08-10-09	 08/10/09	 08/10/09	 08-10-09
		Lack of Attention						

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Drawing Name: EC 135 SKIDTUBE ASSEMBLY

Job Number: 41332

Part Number: D135751011

Job Number:



Seq. #:

Machine Or Operation:

Description :

9.0

D35043

375

Crossbolt Spacer



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

CROSSBOLT SPACER

Batch:

B 31232

BE 08/10/21

10.0

D35041

5

Crossbolt Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

CROSSBOLT SPACER

Batch:

B 31234

BE 08/10/21

11.0

D35051

Web



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEB

Batch:

42531

42 08-10-16

12.0

D35061

Doubler



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

DOUBLER

Batch:

B 41605

JB 8-10-22

13.0

D35063

Doubler



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

DOUBLER

Batch:

B 28964

JB 8-10-22

14.0

D35045

750

Crossbolt Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

CROSSBOLT SPACER

batch:

B 36181

BE 08/10/21

15.0

MS20601AD4W3

Rivet



Comment: Qty.: 12.0000 Each(s)/Unit Total : 12.0000 Each(s)

Rivet

Batch:

B 107823

JB 8-10-22

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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Job Number: 41332

Part Number: D135751011

Job Number:



Seq. #:

Machine Or Operation:

Description :

16.0

SKIDTUBES 1

SKIDTUBESS RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Open X-Bolt holes to .375"(2Places) & .500"(2Places) as per Dwg D3507. and Detail "F"

2-Counter Sink X-BOLT holes as per Dwg D3507

3-Deburr and blow out chips from inside of tube.

4-Bond web as per Dwg D3507 & QSI 015

A/R 241 Sike Flex Batch: 109378

Exp Date: 8-11-05

5-Weld x-bolt (D3504-1/-3)spacers as per Dwg D3507 and Detail C-C & D-D.

A/R AL ROD Batch: M109213

6-Grind welds flush

7-Drill Rivet Holes as per Dwg D3507 Using Dt8871A&B

8-Deburr Rivet holes.

RT 08-10-15

RT 08-10-16

JB 8-10-22

Tools: E

17.0

QC10

VISUAL INSPECTION OF GROUND WELDS



Comment: VISUAL INSPECTION OF GROUND WELDS

5 08/10/22 @

18.0

SKIDTUBES 1

SKIDTUBESS RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Rivet D3506-1/-3 as per Dwg D3507.

JB 8-10-22

19.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

5 08/10/22 @

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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Drawing Name: EC 135 SKIDTUBE ASSEMBLY

Job Number: 41332

Part Number: D135751011

Job Number:



Seq. #:

Machine Or Operation:

Description :

20.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



(14)

Comment: HAND FINISHING RESOURCE #1

Pressure wash as per QSI 005

*M-L*

08/10/25

21.0

POWDER COATING

POWDER COATING



(12)

Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

1:00  
320 °F  
1:30

*M-L*

08/10/25

22.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

08-10-27

(21)

23.0

ALS71032130

Insert



Comment: Qty.: 38.0000 Each(s)/Unit Total: 38.0000 Each(s)

Insert

Batch: M105819

*MS*

\*

24.0

ALS41032225

Insert



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Insert

Batch: M100621

*MS*

25.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Install Wearplate & Ground Wire inserts as per Dwg D3507.

*MS*

08-10-27

(21)

26.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

Inspect Inserts

08/10/27

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Date: Monday, 18/08/2008 3:40:19 PM  
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Drawing Name: EC 135 SKIDTUBE ASSEMBLY

Job Number: 41332

Part Number: D135751011

Job Number:



Seq. #:

Machine Or Operation:

Description :

27.0

AN526C1032R10

Screw



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)  
Screw  
batch: M108062 *JS*

28.0

D29653

Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)  
Cap  
Batch: B29993 *JS*

29.0

D2965

Cap, 105 Skidtube



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)  
Cap  
Batch: B341523 *JS*

30.0

D35081

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)  
WEARPLATE  
Batch: B31195 *JS*

31.0

D35083

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)  
WEARPLATE  
Batch: B38527 *JS*

32.0

D35085

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)  
WEARPLATE  
Batch: B31197 *JS*

33.0

D35087

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)  
WEARPLATE  
Batch: B36198 *JS* 08.10.27 *(X)*

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Date: Monday, 18/08/2008 3:40:09 PM  
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## Process Sheet

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Drawing Name: EC 135 SKIDTUBE ASSEMBLY

Job Number: 41332

Part Number: D135751011

Job Number:



Seq. #:

Machine Or Operation:

Description :

34.0

D35581

Gasket



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch: B 29998

Handwritten signature

35.0

D35583

Gasket



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch: B 38613

Handwritten signature

36.0

D35585

Gasket



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch: B 3000

Handwritten signature

37.0

D35587

Gasket



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch: B 36388

Handwritten signature

38.0

D3492041

Plug Assembly



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

PLUG ASSEMBLY

Batch: B 34182

Handwritten signature

39.0

D3492043

Plug Assembly



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

PLUG ASSEMBLY

batch B 41138

Handwritten signature

40.0

D3492047

Plug Assembly



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

PLUG ASSEMBLY

Batch: B 28961

Handwritten signature

08.10.27

(7)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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Job Number: 41332

Part Number: D135751011

Job Number:



Seq. #:

Machine Or Operation:

Description :

41.0

AN960C10L

washer



Comment: Qty.: 33.0000 Each(s)/Unit Total: 33.0000 Each(s)

Washer

Batch: M109282

HL

42.0

AN3C4A

BOLT



Comment: Qty.: 31.0000 Each(s)/Unit Total: 31.0000 Each(s)

BOLT

Batch: (20x) M109297 (11x) M109431

HL

43.0

AN3C5A

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Bolt

Batch: M1108928

HL

44.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

✓ 1-Inspect for Foreign objects

✓ 2-Install Fwd & Aft caps as per Dwg D3507 And Detail "A" & "B"

A/R 241 Sika Flex Batch: M109449  
Exp Date: 08/11

✓ 3-Install Wearplates as per Dwg D3507 ,

Note: Install (1) Bolt and (1) washer on Ground Wire insert on top of tube

Do not Install Scews where indicated on Dwg(Note #6)

✓ A/R 241 Sika Flex Batch: M109449  
Exp Date: 08/11

✓ 4-Install Plug assemblys as per Dwg D3507.

5- Wing Walk as per Dwg D3043 and QSI 005 4.4

A3507

- M109219

FZ 08/10/27

①

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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Job Number: 41332

Part Number: D135751011

Job Number:



Seq. #:

Machine Or Operation:

Description :

45.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

SS 08/0/28 @

46.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1  
Pick Packing Kit

47.0

D35121

Wearplate



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)  
WEARPLATE  
Batch: 33115 40360

SS 08/0/29

48.0

AN960JD10L

Washer



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)  
Washer  
Batch: M105793

SS 08/0/29 @

49.0

AN3C4A

BOLT



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)  
BOLT  
BATCH: M108599

Batch not in comp

SS 08/0/29 @

50.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

SS 08/0/30 @

51.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D135-751-011

Location: \_\_\_\_\_

PPP Rev: \_\_\_\_\_

Rev B

SS 08/0/29 @

B 41332

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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Seq. #:

Machine Or Operation:

Description :

52.0

QC21

FINAL INSPECTION/W/O RELEASE



08/10/31 *[Signature]*

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



*mf* 08-10-30

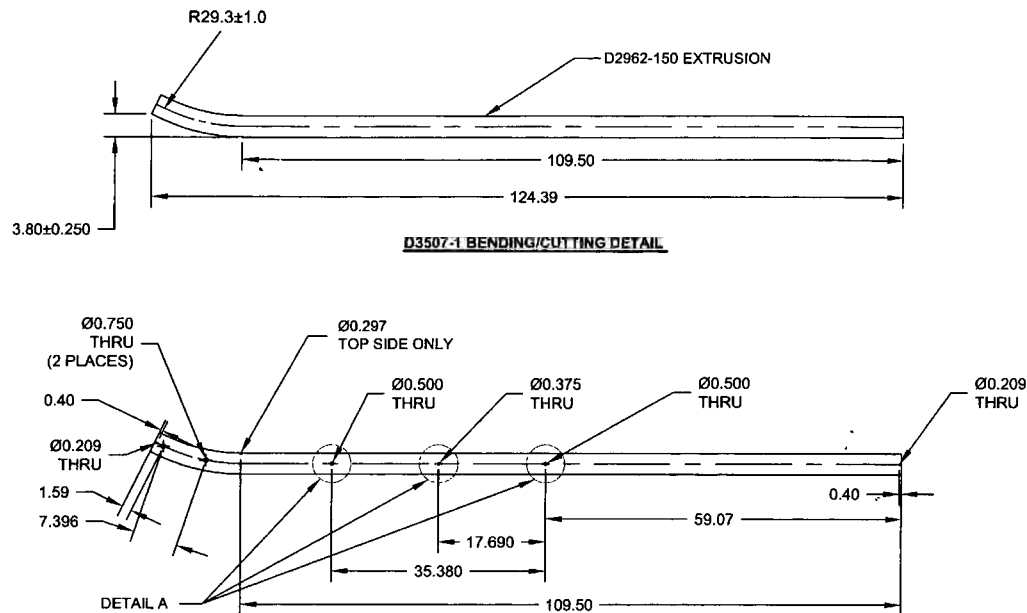
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

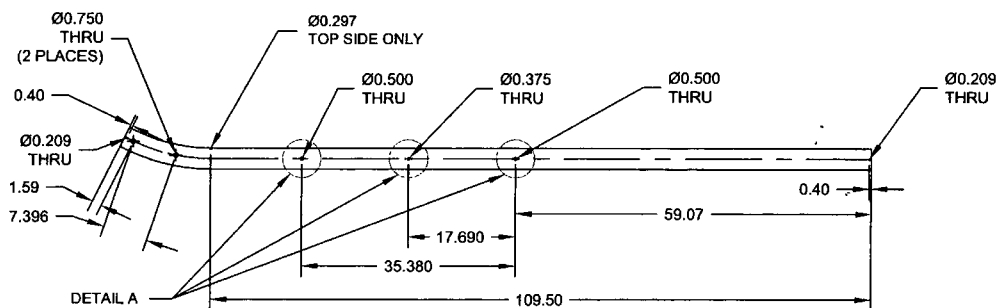
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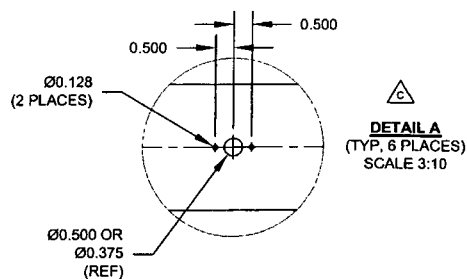
NOTE: Date & initial all entries



**D3507-1 BENDING/CUTTING DETAIL**



**D3507-1 DRILLING DETAIL**



**DETAIL A**  
(TYP, 6 PLACES)  
SCALE 3:10

Qty	Part Number	Description
X	D3607-041	SKIDTUBE ASSEMBLY
1	D2962-150	EXTRUSION
1	D2965	CAP
1	D2965-3	CAP
4	D3492-041	PLUG ASSEMBLY
4	D3492-043	PLUG ASSEMBLY
2	D3492-047	PLUG ASSEMBLY
2	D3504-1	CROSS BOLT SPACER
1	D3504-3	CROSS BOLT SPACER
2	D3504-5	CROSS BOLT SPACER
1	D3505-1	WEB
4	D3506-1	DOUBLER
2	D3506-3	DOUBLER
1	D3508-1	WEARPLATE
1	D3508-3	WEARPLATE
1	D3508-5	WEARPLATE
1	D3508-7	WEARPLATE
1	D3558-1	GASKET
1	D3558-3	GASKET
1	D3558-5	GASKET
1	D3558-7	GASKET
38	AELS-1032-130	INSERT
1	AELS-1032-225	INSERT
31	AN3C4A	BOLT
2	AN3C5A	BOLT
2	AN526C1032-10	SCREW
33	AN960C10L	WASHER
12	MS20601AD4W3	RIVET

**GENERAL NOTES:**

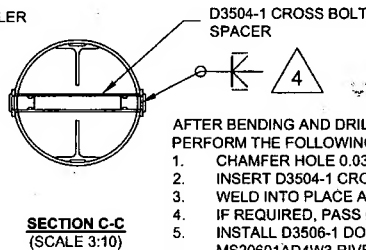
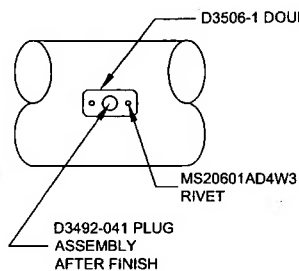
- 1) FINISH:  
CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSERTING D3505-1 WEB. POWDER COAT ASSEMBLY GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3. ANTI-SKID PAINT AS INDICATED TO 1.00 ABOVE CENTER LINE PER DART QSI 005 4.4.
- 2) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) DIMENSIONS: INCHES UNLESS OTHERWISE NOTED
- 4) WELDING TO BE DONE PER DART QSI 004
- 5) INSERT D3505-1 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015 AFTER BENDING
- 6) USE DART DRILL TEMPLATE DT8868 TO LOCATE AND DRILL Ø0.297 HOLES (38 PLACES) FOR WEARSHOE INSERTS. INSTALL AELS-1032-130 PER SECTION C-C (38 PLACES) AFTER FINISH. SEAL WEARPLATE BOLTS WITH SIKAFLEX-241/-291.
- 7) DO NOT INSTALL AN3C4A BOLTS AND AN960C10L WASHERS IN INDICATED LOCATIONS

C	ADD D3504-5, FOR SKID GEAR DEFLECTOR; CHANGE FWD CAP BOLT TO AN526C1032-10 SCREW	DC	07.09.19
B	ADD GASKET, CHANGE HARDWARE MAT'L	PH	06.11.01
A	NEW ISSUE	PH	06.04.21
REV.	DESCRIPTION	BY	DATE
DESIGN	PH		
DRAWN	JIC		
CHECKED	PH		
MFG. APPR.	PH		
APPROVED	PH		
DE APPR.	PH		
DATE	07.09.19		
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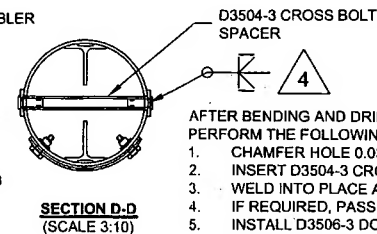
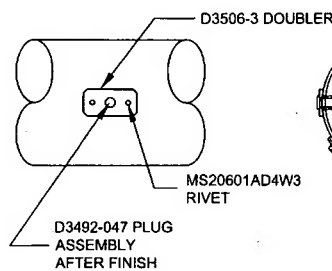
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 07.11.16





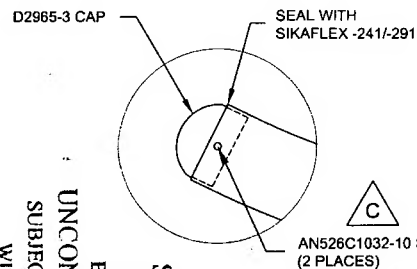
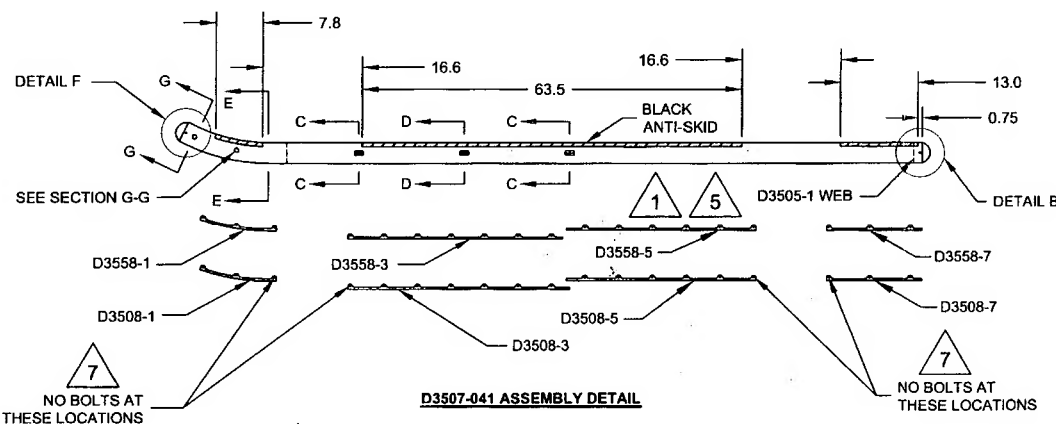
- AFTER BENDING AND DRILLING ASSEMBLY  
PERFORM THE FOLLOWING FOR Ø0.500 HOLES ONLY:
1. CHAMFER HOLE 0.030 x 45°
  2. INSERT D3504-1 CROSS BOLT SPACER (2 PLACES)
  3. WELD INTO PLACE AND GRIND FLUSH
  4. IF REQUIRED, PASS Ø0.404 (7/16" DRILL) THRU HOLE
  5. INSTALL D3506-1 DOUBLER (4 PLACES) USING MS20601AD4W3 RIVET (8 PLACES)
  6. AFTER FINISH, INSTALL D3492-041 PLUG ASSEMBLY (4 PLACES)

**SECTION C-C**  
(SCALE 3:10)

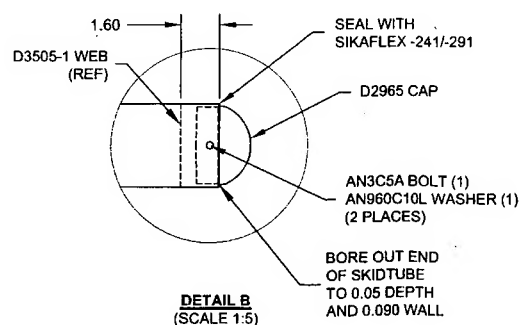


- AFTER BENDING AND DRILLING ASSEMBLY  
PERFORM THE FOLLOWING FOR Ø0.375 HOLES ONLY:
1. CHAMFER HOLE 0.030 x 45°
  2. INSERT D3504-3 CROSS BOLT SPACER (1 PLACES)
  3. WELD INTO PLACE AND GRIND FLUSH
  4. IF REQUIRED, PASS Ø0.277 (J' DRILL) THRU HOLE
  5. INSTALL D3506-3 DOUBLER (2 PLACES) USING MS20601AD4W3 RIVET (4 PLACES)
  6. AFTER FINISH, INSTALL D3492-047 PLUG ASSEMBLY (2 PLACES)

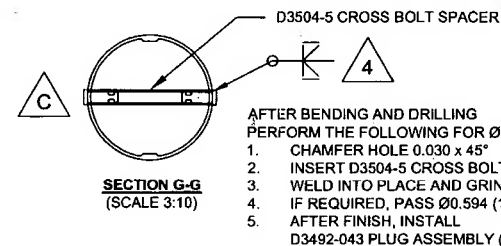
**SECTION D-D**  
(SCALE 3:10)



**DETAIL F**  
(SCALE 1:5)

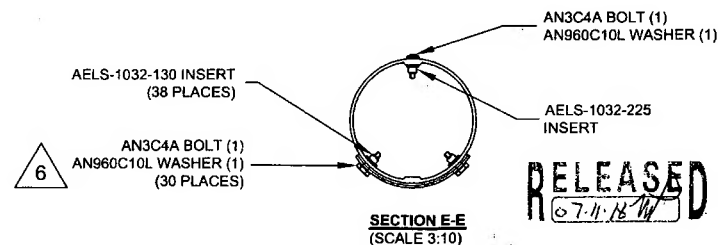


**DETAIL B**  
(SCALE 1:5)



**SECTION G-G**  
(SCALE 3:10)

- AFTER BENDING AND DRILLING  
PERFORM THE FOLLOWING FOR Ø0.750 HOLES ONLY:
1. CHAMFER HOLE 0.030 x 45°
  2. INSERT D3504-5 CROSS BOLT SPACER (2 PLACES)
  3. WELD INTO PLACE AND GRIND FLUSH
  4. IF REQUIRED, PASS Ø0.594 (19/32 DRILL) THRU HOLE
  5. AFTER FINISH, INSTALL D3492-043 PLUG ASSEMBLY (4 PLACES)



**SECTION E-E**  
(SCALE 3:10)

**RELEASED**  
07-11-18

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APPROVED	PH	TITLE	SCALE
DE APPR.	PH	EC 135 SKIDTUBE	1:20
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NO. 179

AWS D17.1.2001  
QUALIFICATION TEST RECORD

Name: Barclay Elliot  
Job number: 841333  
Part number: 135 751011  
Description: SKID tube  
Welding Process: Tig[☒] Mig[ ]  
Base material: Alum.  
Current: AC[☒] DC[ ]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[ ]  
Penetration: pass[☒] fail[ ]

UNACCEPTABLE

Cracks: pass[ ] fail[ ]  
Undercut: pass[☒] fail[ ]  
Pin holes: pass[☒] fail[ ]  
Overlap (cold lap): pass[ ] fail[ ]  
Porosity (surface): pass[☒] fail[ ]  
Coloration: pass[☒] fail[ ]

Qualifier David Lund Date of Test Coupon 08/10/22

Welder Barclay Elliot Date of Test Coupon 08/10/22

The above named individual is qualified in accordance with AWS D17.1.2001 to weld